

WHAT IS CLAIMED IS:

1. A substantially purified oligonucleotide having a sequence selected from the group consisting of:

5'-CCG GGA GAG CCA TAG TGG TCT GCG-3' (SEQ ID NO:3),

5'-TAA TAC GAC TCA CTA TAG GGG CAG AAA GCG TCT AGC CAT

GGC GTA AAA TCC GGT AGT AAC TTG CTA ACC-3' (SEQ ID NO:4),

5'-CTC GCA AGC ACC CTA TCA GGC AGT TAG TGC GGG TGT TGA  
ATG ATT TCC-3' (SEQ ID NO:5), and

5'-TTG GCA ACA GTG GCA TGC ACC G-3' (SEQ ID NO:6).

2. The oligonucleotide of claim 1, wherein said oligonucleotide is conjugated to a detectable label.

3. The oligonucleotide of claim 2, wherein the detectable label is a fluorescent dye.

4. The oligonucleotide of claim 2, wherein the detectable label is a fluorescent molecular beacon pair.

5. The oligonucleotide of claim 4, wherein the oligonucleotide is 5' [2'-chloro-7'-phenyl-1,4-dichloro-6-carboxyfluorescein (VIC)]-CCG GGA GAG CCA TAG TGG TCT GCG- [6-carboxytetramethylrhodamine (TAMRA)] 3' or 5' [6-carboxyfluorescein(FAM)]- TTG GCA ACA GTG GCA TGC ACC G - [6-carboxytetramethylrhodamine (TAMRA)]3'.

6. The oligonucleotide of claim 1, wherein said oligonucleotide is SEQ ID NO:4 and SEQ ID NO:5.

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FIGURE 1

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7. A method for producing an oligonucleotide that is a hybrid of lambda phage-HCV nucleic acid sequence, comprising:

amplifying lambda phage DNA using a pair of oligonucleotide primers having the sequences set forth in SEQ ID NO:4 and SEQ ID NO:5 to provide a plurality of lambda phage-HCV hybrid amplicons; and

reverse transcribing and purifying the resultant lambda phage-HCV hybrid RNA.

8. A method for detecting the presence or amount of HCV nucleic acids in a test sample, comprising:

(a) reverse transcribing and amplifying HCV nucleic acid if present in said sample using a pair of oligonucleotide primers having the sequences set forth in SEQ ID NO:1 and SEQ ID NO:2;

(b) hybridizing said amplified HCV nucleic acids with an oligonucleotide probe having the sequence set forth in SEQ ID NO:3, wherein said probe is conjugated to 2'-chloro-7'-phenyl-1,4-dichloro-6-carboxyfluorescein (VIC) and 6-carboxytetramethylrhodamine (TAMRA) in the presence of an enzyme that cleaves said probe when said probe hybridizes to said HCV nucleic acids; and

(c) detecting a signal from said probe, wherein said signal indicates the presence or amount of HCV nucleic acids in said test sample.

9. The method of claim 8, wherein lambda phage-HCV nucleic acid hybrids are introduced into said test sample, reverse transcribed and amplified using the pair of oligonucleotide primers of amplifying step (a) to produce lambda phage-HCV hybrid amplicons.

10. The method of claim 9, wherein said lambda phage-HCV hybrids are hybridized to a control oligonucleotide probe having the sequence set forth in SEQ ID NO:6, wherein the control oligonucleotide probe is conjugated to 6-carboxyfluorescein (FAM) and 6-carboxytetramethylrhodamine (TAMRA).

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11. The method of claim 8, wherein said test sample is selected from the group consisting of serum, blood, plasma, cerebral spinal fluid, synovial fluid, and urine.

12. The method of claim 8, wherein nucleic acids are purified from said sample prior to said reverse transcription and amplification step (a).

13. The method of claim 12, wherein lambda phage-HCV ribonucleic acid hybrids are introduced into said test sample prior to isolating nucleic acids from said sample.

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FOOTNOTES